



2017 Birdsall-Dreiss Distinguished Lecture
**Water Resource Stewardship in
the U.S. National Park Service**
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Abstract. On August 25, 1916, President Woodrow Wilson signed the act creating the National Park Service, a new bureau in the Department of the Interior. This “Organic Act” directed the Park Service “to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This conservation, enjoyment and protection mandate also applies to water resources within parks.

Unlike most park resources, that are located largely within park boundaries, or are completely under the management control of the National Park Service, park water resource issues and management often involve greater challenges. These challenges arise from the fact that surface water and aquifer boundaries often extend beyond park boundaries and because the legal authority to allocate and manage water resources typically resides with the states. Thus, parks often need to consider resource issues at a larger landscape, or seascape scale, and manage collaboratively with neighbors and partners to protect, manage and restore water resources. In addition, water resource expertise is not always available within a park, resulting in the need to partner with other agencies, universities, friends groups, or regional and national offices. Lastly, many park water resource issues have broader legal, political, socioeconomic, and cultural implications requiring park managers to consider more than just science alone when making a water resource management decision.

The lecture, using examples from parks across the United States, will explore the process of how parks identify water resource needs, issues and concerns, and how they develop and apply scientific information needed to make water resource management decisions. Specific challenges to decision making and park water resource management will be presented and explored including trans-boundary issues, partnership building, scientific uncertainty, funding and personnel/expertise, and making science-based decisions that also appropriately consider legal, political, socioeconomic, and cultural impacts of the decision. As part of the visit, the lecturer will also present future water resource research and management needs in parks and across the nation, present information about engaging in water resources research within parks, and advise students on programs for seasonal and permanent employment as a water resource professional within the National Park Service.

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